1-7-06

OPE William a Simpson 10/180,233

Reply to Office Action Summary

In order to facilitate the comparison of the present invention, application No. 10/780,233, with the Stewart and Reedy patents, the following scenario of (10/780,233) is provided.

In an electrical system such as that of the city of Los Angeles, about 2,000,000 low priority residential and small businesses electrical services would be equipped with the invention.

Should a transmission line carrying 750 megawatts of power fail, the frequency of the electrical system would drop below 59 ½ cycles. At 59 ½ cycles, all 2,000,000 frequency sensitive switches would open, disconnecting 1,000 megawatts of the load.

The electrical system would remain stable and the generators would quickly return to 60 cycles.

During the emergency disconnecting of the load from the overloaded electrical system, all low priority residential and small business costumers would be left with approximately ½ of their circuits still energized.

High priority customers such as high rise buildings and traffic signals would not be affected by the electrical system overload.

After a time delay, to assure the availability of generation, the switches would be closed according to one of the options listed in the specification.

The Reedy patent is concerned with disconnecting generation in a faulted electrical system.

The Stewart patent disconnects a 240 volt circuit. The two 120 volt circuits remain energized.

The object of the Stewart patent is to control the voltage supplied to the 240 volt circuit. This is accomplished by changing the phase angle between the two 120 volt circuits connected to the 240 volt load.

This results in a complex and expensive method of disconnecting the 240 volt load, while the 120 volt load remains intact.

The cost may be prohibitive in an installation of the millions of these devices on a large power grid.

Every low priority residence and small business served by the power grid requires a device for disconnecting the load during an overload emergency.